

## ABSTRACT

The present invention relates generally to a molecular marker of a behavioral disorder such as but not limited to Attention Deficit Hyperactivity Disorder (ADHD) and to its use in the diagnosis of a behavioral disorder or an assessment of a likelihood that a subject may develop the behavioral disorder. A behavioral disorder also includes an intellectual disability. The molecular marker in essence determines the presence of genetic predisposition for development of the behavioral disorder, the development of which, or its degree of severity, may be further determined or exacerbated by environmental or social conditions. The molecular marker of the present invention may be in the form of a proteinaceous molecule or a genetic sequence. The ability to identify "at risk" individuals permits the implementation of medicinal, behavioral and/or personal management protocols to reduce the likelihood of development of, or to ameliorate one or more of the symptoms of, a behavioral disorder. The present invention contemplates, therefore, diagnostic assays and therapeutic agents in the prophylaxis and/or treatment of a behavioral disorder. The present invention further contemplates screening *in utero* as well as screening parents, or potential parents, for a likelihood of passing on a genetic predisposition to a behavioral disorder. The latter individuals or subjects identified as having a predisposition to the development of a behavioral disorder can then undergo behavioral modification protocols to control any development of a behavioral disorder.